

Gly Lys Asp Ser Val Lys Ala Pro Val Tyr Ser His Leu Thr Tyr Asp
 130 135 140
 Arg Glu Glu Gly Val Phe Glu Val Val Glu Gln Ala Asp Ile Val Ile
 145 150 155 160
 Ile Glu Gly Ile Asn Val Leu Gln Ser Pro Thr Leu Glu Asp Asp Arg
 165 170 175
 Glu Asn Pro Arg Ile Phe Val Ser Asp Phe Phe Asp Phe Ser Ile Tyr
 180 185 190
 Val Asp Ala Glu Glu Ser Arg Ile Phe Thr Trp Tyr Leu Glu Arg Phe
 195 200 205
 Arg Leu Leu Arg Glu Thr Ala Phe Gln Asn Pro Asp Ser Tyr Phe His
 210 215 220
 Lys Phe Lys Asp Leu Ser Asp Gln Glu Ala Asp Glu Met Ala Ala Ser
 225 230 235 240
 Ile Trp Glu Ser Val Asn Arg Pro Asn Leu Tyr Glu Asn Ile Leu Pro
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 Lys Pro Asp Pro Asn Gln Leu Ser Phe Gly Arg Val Phe Thr Asp His
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 Met Phe Val Met Asp Tyr Ala Ala Asp Lys Gly Trp Tyr Asp Pro Arg
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 atc att cct tat caa ccc tta tca atg gat cca act gca atg gtc tat 192
 Ile Ile Pro Tyr Gln Pro Leu Ser Met Asp Pro Thr Ala Met Val Tyr
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 cac tac ggc caa acc gtg ttt gaa ggg tta aag gct tac gtg tca gag 240
 His Tyr Gly Gln Thr Val Phe Glu Gly Leu Lys Ala Tyr Val Ser Glu
 65 70 75 80

gat gac cat gtt ctg ctt ttc aga ccg gaa aaa aat atg gaa cgc ctg 288
Asp Asp His Val Leu Leu Phe Arg Pro Glu Lys Asn Met Glu Arg Leu
85 90 95

aat caa tca aac gac cgc ctc tgc atc ccg caa att gat gaa gaa cag 336
Asn Gln Ser Asn Asp Arg Leu Cys Ile Pro Gln Ile Asp Glu Glu Gln
100 105 110

gtt ctt gaa ggc tta aag cag ctt gtc gca att gat aaa gac tgg att 384
Val Leu Glu Gly Leu Lys Gln Leu Val Ala Ile Asp Lys Asp Trp Ile
115 120 125

cca aat gcg gag ggc acg tcc ctt tac atc cgt ccg ttc atc atc gca 432
Pro Asn Ala Glu Gly Thr Ser Leu Tyr Ile Arg Pro Phe Ile Ile Ala
130 135 140

acc gag cct ttc ctt ggt gtt gcg gca tct cat acg tat aag ctc ttg 480
Thr Glu Pro Phe Leu Gly Val Ala Ala Ser His Thr Tyr Lys Leu Leu
145 150 155 160

atc att ctt tct ccg gtc ggc tct tat tac aaa gaa ggc att aag ccg 528
Ile Ile Leu Ser Pro Val Gly Ser Tyr Tyr Lys Glu Gly Ile Lys Pro
165 170 175

gtc aaa atc gct gtt gaa agt gaa ttt gtc cgt gcg gta aaa ggc gga 576
Val Lys Ile Ala Val Glu Ser Glu Phe Val Arg Ala Val Lys Gly Gly
180 185 190

aca gga aat gcc aaa acc gca gga aac tat gct tca agc tta aaa gcg 624
Thr Gly Asn Ala Lys Thr Ala Gly Asn Tyr Ala Ser Ser Leu Lys Ala
195 200 205

cag cag gta gcc gaa gag aaa gga ttt tct caa gta ctc tgg ctg gac 672
Gln Gln Val Ala Glu Glu Lys Gly Phe Ser Gln Val Leu Trp Leu Asp
210 215 220

ggc att gag aag aaa tac atc gaa gaa gtc gga agc atg aac atc ttc 720
Gly Ile Glu Lys Lys Tyr Ile Glu Glu Val Gly Ser Met Asn Ile Phe
225 230 235 240

ttc aaa atc aac ggt gaa atc gta aca ccg atg ctg aac ggg agc atc 768
Phe Lys Ile Asn Gly Glu Ile Val Thr Pro Met Leu Asn Gly Ser Ile
245 250 255

ctg gaa ggc att acg cgc aat tca gtc atc gcc ttg ctt aag cat tgg 816
Leu Glu Gly Ile Thr Arg Asn Ser Val Ile Ala Leu Leu Lys His Trp
260 265 270

ggc ctt caa gtt tca gaa cga aaa att gcg atc gat gag gtc atc caa 864
Gly Leu Gln Val Ser Glu Arg Lys Ile Ala Ile Asp Glu Val Ile Gln
275 280 285

gcc cat aaa gac ggc atc ctg gaa gaa gcc ttc gga aca ggt aca gca 912
Ala His Lys Asp Gly Ile Leu Glu Glu Ala Phe Gly Thr Gly Thr Ala
290 295 300

gct gtt att tcc cca gtc ggc gag ctg atc tgg cag gat gaa aca ctt 960
Ala Val Ile Ser Pro Val Gly Glu Leu Ile Trp Gln Asp Glu Thr Leu
305 310 315 320

tcg atc aac aac ggt gaa aca gga gaa atc gca aaa aaa cta tat gac 1008

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Ser Ile Asn Asn Gly Glu Thr Gly Glu Ile Ala Lys Lys Leu Tyr Asp
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 340 345 350

acg acc gaa gtc gca gcg ctg act gaa agc aag taa 1092
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<212> PRT

<213> Bacillus subtilis

<400> 63

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Met Phe Val Met Asp Tyr Ala Ala Asp Lys Gly Trp Tyr Asp Pro Arg
 35 40 45

Ile Ile Pro Tyr Gln Pro Leu Ser Met Asp Pro Thr Ala Met Val Tyr
 50 55 60

His Tyr Gly Gln Thr Val Phe Glu Gly Leu Lys Ala Tyr Val Ser Glu
 65 70 75 80

Asp Asp His Val Leu Leu Phe Arg Pro Glu Lys Asn Met Glu Arg Leu
 85 90 95

Asn Gln Ser Asn Asp Arg Leu Cys Ile Pro Gln Ile Asp Glu Glu Gln
 100 105 110

Val Leu Glu Gly Leu Lys Gln Leu Val Ala Ile Asp Lys Asp Trp Ile
 115 120 125

Pro Asn Ala Glu Gly Thr Ser Leu Tyr Ile Arg Pro Phe Ile Ile Ala
 130 135 140

Thr Glu Pro Phe Leu Gly Val Ala Ala Ser His Thr Tyr Lys Leu Leu
 145 150 155 160

Ile Ile Leu Ser Pro Val Gly Ser Tyr Tyr Lys Glu Gly Ile Lys Pro
 165 170 175

Val Lys Ile Ala Val Glu Ser Glu Phe Val Arg Ala Val Lys Gly Gly
 180 185 190

Thr Gly Asn Ala Lys Thr Ala Gly Asn Tyr Ala Ser Ser Leu Lys Ala
 195 200 205

Gln Gln Val Ala Glu Glu Lys Gly Phe Ser Gln Val Leu Trp Leu Asp
 210 215 220

Gly Ile Glu Lys Lys Tyr Ile Glu Glu Val Gly Ser Met Asn Ile Phe

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